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Division of Environmental Permits, 4th Floor
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Joe Martens
Commissioner

June 9, 2014

Mr. Tom Rhoades, P.E.
Commissioner
Onondaga Co. Dept of Water Environment Protection
650 Hiawatha Blvd West
Syracuse, NY 13204-1194

7/1/2014
thru
6/30/2019

Re: Baldwinsville-Seneca Knolls WWTP
DEC#7-3136-00017/00001 SPDES#: NY0030571

Dear Mr. Rhoades:

Enclosed is a final renewed State Pollutant Discharge Elimination System (SPDES) permit for the above referenced facility. Comments on the draft permit were received from you and Ms. Michelle Josilo, NPDES Section Chief, USEPA, Region 2. All comments are addressed in the enclosed responsiveness summary.

Be advised, the Uniform Procedures Regulations (6NYCRR Part 621) provide that an applicant may request a public hearing if a permit contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of permit issuance and must be addressed to the Chief Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Should you have questions on the administration of this modification and renewal, please feel free to contact me at the address or phone number listed above. Should you have technical questions on permit content, please contact the permit engineer, John Weidman, at (518) 402-8197, or the Regional Water Engineer, Joseph Zalewski, at (315) 426-7500.

Sincerely,

Teresa Diehsner
Division of Environmental Permits

Enclosure
c: D. Bimber, RPA
J. Zalewski, RWE
J. Weidman, Permit Engineer
C. Jamison, CO-BWP Permit Coordinator
M. Josilo, EPA Reg 2
N. Myers, NYSEFC
M. Child, IJC
NYSDOH District Office

Responsiveness Summary
Baldwinsville-Seneca Knolls WWTP
DEC ID 7-3136-00017/00001 NY0030571
Prepared By: John Weidman, Bureau of Water Permits
May 2014

Background: The above referenced draft SPDES permit was developed after a full technical review was completed and a tentative determination was made to renew the permit. The draft permit was public noticed on 12/12/12 in the Environmental Notice Bulletin and on 12/10/2012 in The Syracuse Post Standard. Comments dated 01/09/13 were received from Tom Rhoads, Commissioner, Onondaga County Department of Water Environment Protection (County). Comments dated 01/10/13 were received from Michelle Josilo, NPDES Section Chief, Clean Water Regulatory Branch, US Environmental Protection Agency (USEPA), Region 2. All comments are addressed below. A revised draft has been provided to USEPA.

Comments received on January 10, 2013 from Michelle Josilo, NPDES Section Chief, Clean Water Regulatory Branch, United States Environmental Protection Agency, Region 2

EPA Comment 1 – Action Levels: The fact sheet for the draft Baldwinsville Seneca Knolls WWTP permit does not provide enough information to clearly understand how the action levels were developed. The EPA cannot determine if all applicable requirements regarding reasonable potential and action levels have been met because of insufficient information. Please ensure that the proposed Baldwinsville Seneca Knolls WWTP permit contains information regarding the rationale and development of the action levels established in the permit.

> **Response**: Table 1 of the fact sheet has been updated to include existing effluent data using the last three years of data for each parameter. After reviewing the results of the statistical analysis using the Projected Effluent Quality (PEQ) process outlined in TOGS 1.3.3 some action levels have been adjusted. It should be noted that an action level is a numerical reporting level, accompanied by monitoring requirements. It is **not** an effluent limit. It is a triggering mechanism which, if exceeded, requires the permittee to notify the Department of such exceedence. The Department reviews the exceedence to determine the need for permit modification, to either increase the action level or to require a water quality based effluent limitation (WQBEL). The permit has been revised accordingly to reflect the updated action levels.

EPA Comment 2 – Biosolids Language: The EPA suggests that, where applicable, SPDES permits should include a condition requiring compliance with 6 NYCRR Part 360 in order clearly inform the permittee of the full breadth of regulations regarding publically-owned treatment works (POTWs) and biosolids.

> **Response**: The General Conditions page of the permit has been updated accordingly.

EPA Comment 3 – Citations: The draft Baldwinsville-Seneca Knolls WWTP permit contains the following incorrect citations:

1) Section A(3) of the Pretreatment Program Implementation Requirements should reference to 40 CFR §403.3(p) and Section B(4)(c) should reference 40 CFR §403.8(f)(2)(viii).

Response: The citation has been corrected as suggested.

2) The EPA guidance manual referenced on page 15 of the draft permit, Storm Water Management for Industrial Activities, September 1992, EPA 832-R-92-006, is out of date. The EPA has new guidance, such as Developing Your Stormwater Pollution Prevention Plan - A Guide for Industrial Operators, February 2009, EPA 833-B-09-002.

Response: The citation has been corrected as suggested.

EPA Comment 4 – Dissolved Oxygen: New York State Water Quality Standards at 6 NYCRR Part 703.3 states that, for class B waters, the minimum daily average concentration for dissolved oxygen (DO) shall not be less than 5.0 mg/L and at no time shall the DO concentration be less than 4.0 mg/L. The draft Baldswinsville-Seneca Knolls permit does not establish a DO effluent limit nor does the fact sheet provide a reasonable potential analysis for DO. With no discussion of existing DO data, it is unclear whether the discharge meets New York State Water Quality Standards or if a limit is required based on reasonable potential analysis.

Response: The fact sheet has been revised to indicate that a worst case dissolved oxygen level of 2.0 mg/l was used to calculate permit limits. Therefore, the permit has been revised and a minimum dissolved oxygen limit of 2.0 mg/l has been added which will ensure that the discharge meets New York State Water Quality Standards as all times.

EPA Comment 5 – General Conditions: The draft Baldwinsville Seneca Knolls WWTP permit does not adequately incorporate general permit conditions as required by federal regulations. The Baldwinsville-Seneca Knolls WWTP permit must adequately incorporate all applicable general conditions as required by 40 CFR §122.41 and §122.42.

Response: The last page of the permit has been replaced with new language specific to General Conditions which has been approved by EPA and DEC.

EPA Comment 5 – Mercury, TOGS 1.3.10: Mercury provides that the Multiple Discharger Variance (MDV) is in effect for "five years from the effective dates specified on page 1 of this document". Page 1 indicated that the issue date (assuming this is the effective date as well) is October 2010, therefore the MDV is only in effective until September 2015. As the term of the draft Baldwinsville-Seneca Knolls WWTP permit extends beyond the expiration date of the MDV, the permit must reflect a final water quality-based effluent limit (WQBEL) of 0.7 ng/l as of September 2012 unless other relief is provided in the permit (i.e., compliance schedules, renewal of the MDV).

Response: NYSDEC's interpretation of the applicable regulations (40 CFR Part 132, Appendix F, Procedure 2 and 6 NYCRR Part 702.17) and policy (DOW 1.3.10, Section 4.2.1.11) is that the MDV may be applied from October 2010 thru September 2015 and that the "variance" actually happens when an individual permit is changed to include these requirements, i.e., if the MDV is applied to a permit prior to October 2015 then the resulting requirements may be in effect for the permit term which extends past October 2015. NYSDEC's interpretation is consistent with practices in other States.

EPA Comment 6 – Mercury Method 1631: The Baldwinsville-Seneca Knolls WWTP refers to "EPA Method 1631". Please ensure that EPA Method 1631E is referenced.

Response: Required mercury methods are identified in the SPDES permit in accordance with TOGS 1.3.10, which was accepted by USEPA. One of the permit general conditions requires use of methods in accordance with NYSDOH ELAP requirements. 1631E is currently the only accepted ELAP 1631 method so permittees should not be using other 1631 methods. If USEPA were to again update 1631 then DEC believes that the existing permit language is sufficiently flexible to avoid the need for permit modifications to correct the version to 1631F, 1631G, etc. For the above reasons DEC believes that the mercury method citations in the permit are satisfactory and that no changes are necessary.

EPA Comment 7 – Pathogen Criteria: The draft Baldwinsville-Seneca Knolls WWTP permit does not establish any effluent limits for total coliforms. The total coliform criteria for class B waters, established in the New York State Water Quality Standards at 6 NYCRR Part 703.4, shall be met when NYSDEC determines necessary to protect human health. A letter dated January 22, 2009 from James DeZolt, Director of NYSDEC's Division of Water, to Barbara Finazzo of EPA Region 2, states that "NYSDEC interprets 6 NYCRR Part 703.4(c) to require that the applicable coliform standards be met in those waters which are classified as B, C, D, SB, and SC during those specified periods of the year when recreation is expected to be practiced through the State, unless it is demonstrated by the permittee that there is no public health need." In order to comply with NYSDEC's interpretation of their water quality standards for coliforms, please ensure that the Baldwinsville-Seneca Knolls WWTP permit establishes, at minimum, a seasonal effluent limit for total coliforms.

Response: The proposed fecal coliform limits are consistent with DEC's existing disinfection policy in TOGS 1.3.3. Parallel monitoring for total coliform is not typically required.

EPA Comment 8 – Sanitary Sewer Overflows: Page 12 of the draft Baldwinsville Seneca Knolls WWTP permit includes a section titled "Best Management Practices for Sanitary Sewer Systems with Active Overflows". The title and provisions in this section are not as stringent as the prohibition of bypass at 40 CFR §122.41. Specifically, the word '"active" in the section title should be removed as it is misleading; overflows are prohibited except as provided under the limited conditions of the permit. NYSDEC has elsewhere characterized this type of overflow as "emergency overflows" which would be a more suitable description for this section. In addition, the first item in the Best Management Practice section states that "dry weather overflows of the sewer system are prohibited". This language should be changed to clearly indicate that overflows are prohibited independent of either dry or wet weather.

Response: The permit has been updated as required to remove "Active" from the title. Page 2 of the permit states "In accordance with 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41, bypass of the collection and treatment system without treatment are prohibited except when (1) the bypass is necessary to prevent loss of life, personal injury, public health hazard or severe property damage and (2) there is no feasible alternative to the bypass and (3) the permittee complies with the notice requirements in 6 NYCRR Part 750-2.7.

EPA Comment 9 – Total Residual Chlorine: The Baldwinsville-Seneca Knolls WWTP permit establishes an interim and final limit for total residual chlorine. As a result, interim milestones

with dates for achievement must be established in a compliance schedule in the permit. EPA regulations regarding compliance schedules can be found at 40 CFR §122.40 and §122.41 and the EPA memorandum from Jim Hanlon, Office of Wastewater Management, to Alexis Strauss, Region 9, Compliance Schedules of Water Quality Based Effluent Limitations in NPDES Permits, May 10, 2007.

Response: The permit has been updated to include interim milestones with dates for achievement which are included in the compliance schedule in the permit.

EPA Comment 10 – Whole Effluent Toxicity: The fact sheet states that a reasonable potential analysis for whole effluent toxicity (WET) was performed and, as a result, the WET testing action levels were retained from the previous permit. The fact sheet does not provide a discussion of the existing effluent quality for WET or a discussion of the reasonable potential analysis. With no discussion of the RPA or existing effluent quality, it is not clear how the permit meets the requirements of 40 CFR §122.41 (d)(ii) or part 132. Please provide a brief discussion of the RPA or existing effluent quality.

Response: A brief discussion of the RPA or existing effluent quality has been added to the fact sheet. The review of quarterly Tier 2 Chronic toxicity test data submitted for a period of one year by Baldwinsville-Seneca Knolls STP SPDES# NY0030571 at Outfall 099 between March and November 2011 was completed (please see summary table in the fact sheet). The toxicity testing was conducted by the facility's contracted laboratory AquaTOX Research, Inc. using the vertebrate fathead minnow (*Pimephales promelas*) and invertebrate water flea (*Ceriodaphnia dubia*) freshwater test species.

All of the tests indicated that the effluent was not chronically toxic with NOEC results $\geq$100% and corresponding TUc results $\leq$1.0 for both species tested. Although the IC25 results were indicative of some chronic toxicity, the effluent is not predicted to be acutely or chronically toxic after mixing with the receiving water of the Class B Seneca River at the Instream Waste Concentration (IWC).

Therefore, due to no exceedances of the toxicity based action levels, additional toxicity testing is not required at this time unless the permit is modified or renewed, as all current requirements have been satisfactorily met as specified in permit. Additionally, application of the Reasonable Potential Determination (RPD) to the acute and chronic results indicates that toxicity based limits are also not required at this time.

Comments received on January 9, 2013 from Tom Rhoads, Onondaga County Department of Water Environment Protection

Comments on Fact Sheet

County Comment 1 – Page 6: Could you please clarify the basis for the chronic dilution ratio of 32 used in the development of the Total Residual Chlorine (TRC) limit.

Response: The following calculation shows how the Department determined the chronic dilution ratio of 32:

(7Q10 of Seneca River + Design Flow) / (Design Flow of Facility)

The 7Q10 of the Seneca River, as is shown on page 8 of the fact sheet, is 276 MGD. The design flow of the facility is 9.0 MGD. By substituting these values into the above equation results in a calculated chronic dilution ration of 31.7. The 7Q10 is defined as the minimum average 7 day flow at a recurrence interval of 10 years.

Comments on Permit

County Comment 2 – Pages 5 and 6 of 21: Please change the location of flow monitoring from "influent" to "effluent" to be consistent with the actual monitoring point located prior to the chlorine contact tank. This facility does not have an influent flow monitoring location or device.

Response: The current permit identifies the location of the flow monitoring as the "influent." However, since the facility does not have an influent flow monitoring location or device the permit has been changed as requested to be consistent with the actual monitoring point, which is prior to the chlorine contact tank. The flow monitoring location is shown on the Monitoring Locations Page of the permit (page 11).

County Comment 3 – Page 11 of 21: This department has historically and would like to continue to provide a comprehensive pretreatment report for all of our facilities once annually. For this reason, it is requested that the reporting cycle for this permit be changed to 90 days following the end of the reporting period to be consistent with the Metropolitan Syracuse WWTP reporting requirement.

Response: The Department will make this change as requested by changing the reporting cycle to 90 days following the end of the period to be consistent with the Metro reporting requirement.

County Comment 4 – Page 12 of 21, Item 7: Onondaga County currently inspects County owned wastewater pumping stations in the Baldwinsville Seneca Knolls (BSK) service area a minimum of three times per week and maintenance is performed as prescribed. Onondaga County also conducts inspections at the Satellite Community owned pump stations at a frequency prescribed by the owner. In most cases, this is performed twice per week. Providing monthly maintenance and inspection summaries to the NYSDEC on a monthly basis will have little or no value in providing a higher level of service to the District rate payers.

The proposed permit language on pages 12 and 13 for the BSK service area seems to be onerous compared to the permit requirements in the previous BSK SPDES permit especially considering that the BSK service area has very few issues if any. The permit language makes the assumption that there are active overflows in the BSK service area. A total of seven (7) sanitary sewer overflows (SSOs) occurred in the BSK service area from January 2008 to December 2012. A review of the seven (7) SSO occurrences revealed five (5) catastrophic mechanical/electrical failures and two (2) SSOs related to a mainline grease blockage. Based on the County's evaluation of the root causes for these SSO occurrences, it is our opinion that none of these events could have been prevented even if all the proposed permit requirements were in effect at the time the SSOs occurred. It is our opinion that our institutional best management practices meet or exceed the listed practices in the permit and do not need to be formalized in a permit.

Response: Item 7 on page 12 of the permit only requires submission of monthly maintenance and inspection summaries to the DEC during months when an overflow has occurred. If no overflow occurs a monthly overflow report is not required for that month. Since only 7 overflows have occurred during the five year period provided (1/2008 to 12/2012) only 7 reports would have been submitted during that five year period. Therefore, no changes will be made to this standard permit language.

County Comment 5 – Page 12 of 21, Item 8: This item is redundant. All SSOs are reported to the NYSDEC per item 1 on page 21 and then a summary is forwarded to the NYSDEC with the monthly Discharge Monitoring Report.

Response: This is standard permit language for facilities with SSOs so no changes to the draft permit are necessary. In addition, this condition does not require any additional work for the County.

County Comment 6 – Page 12 of 21, Item 9: The NYSDEC Part 750 regulations require notification of sanitary sewer overflows that occur within the collection system. The NYSDEC will be well aware of documented and recurrent sewage back-ups because these overflows would be reported on three separate instances (once within 24 hours via e-mail, once with the SSO report and once with the DMR). As stated above, the BSK service area has little or no capacity issues; therefore we are requesting that this permit requirement be dropped from the permit.

Response: Even though the BSK service area may have "little or no capacity issues" this condition would become necessary if capacity issues were to develop during the term of the permit. Therefore, this standard language will remain.

County Comment 7 – Page 12 of 21, Item 10: Onondaga County concurs with the first portion of the permit requirement - Onondaga County will notify County residents using a web based event notification and will allow residents to sign up for e-mail alerts as part of the program. The requirement of "The program shall include a system to determine the nature and duration of conditions that are potentially harmful to users of these receiving waters due to SSOs" is very subjective and we are requesting that this sentence be removed.

Response: Item 10 has been removed. The County may also have additional reporting requirements as per the new Sewage Pollution Right to Know Act. The first phase of the Sewage Pollution Right to Know Act, a system for collecting discharge reports of untreated and partially treated sewage from public wastewater systems, went into effect May 1, 2013. The law, signed by Governor Andrew Cuomo on August 9, 2012, changes the requirements for reporting untreated or partially treated sewage discharges, also known as bypasses, from publicly owned treatment works and imposes new reporting requirements for publicly owned sewer systems and combined sewer overflows.

County Comment 8 – Page 13 of 21, Item 11: We are requesting that this permit requirement be removed. As stated above, each SSO occurrence is reported on three separate occasions and will be listed on the notification web site when a discharge occurs. Adding an additional report has no technical value and adds additional burden to current staff which will divert their attention for the prime duties of operation and maintenance of sewer infrastructure.

Response: The condition of the permit requires submission of an annual report summarizing implementation of the required best management practices (BMPs), not just the reporting of each SSO occurrence. The report must list existing documentation of implementation of the BMPs. The actual documentation is stored at the treatment plant and only made available to DEC upon request. This report does have value to the Department and EPA. Therefore this permit requirement will not be removed.

County Comment 9 – Page 20 of 21: Please insert the attached revised flow schematic with the following modifications: deleted the input of "Anaerobic Sludge from Wetzel Road WWTP by tanker" and, modified the output from the "Belt Filter Press" to show the dewatered biosolids are disposed at the landfill, not at Metro.

Response: The flow schematic on page 20 of the permit has been replaced by the updated version provided by the County.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

State Pollutant Discharge Elimination System (SPDES)
DISCHARGE PERMIT

Industrial Code:	**4952**	SPDES Number:	**NY0030571**
Discharge Class (CL):	**05**	DEC Number:	**7-3136-00017/00001**
Toxic Class (TX):	**N**	Effective Date (EDP):	**07/01/2014**
Major Drainage Basin:	**07**	Expiration Date (ExDP):	**06/30/2019**
Sub Drainage Basin:	**01**	Modification Dates:(EDPM)	
Water Index Number:	**ONT-66-12**		
Compact Area:	**IJC**		

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: **Onondaga County** Attention: **Commissioner, WEP**

Street: **650 Hiawatha Blvd. West**

City: **Syracuse** State: **NY** Zip Code: **13204-1194**

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: **Baldwinsville-Seneca Knolls WWTP**

Location (C,T,V): **Lysander (T)** County: **Onondaga**

Facility Address: **Barbara Lane (off Dennis Drive on Rte 370)**

City: **Lysander** State: **NY** Zip Code: **13027**

NYTM -E: NYTM - N:

From Outfall No.: **099** at Latitude: **43 ° 08 ' 26 ''** & Longitude: **76 ° 18 ' 00 ''**

into receiving waters known as: **Seneca River** Class: **B**

and; (list other Outfalls, Receiving Waters & Water Classifications)

See outfall list, page 2 of permit.

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: **Onondaga County Department of Water Environment Protection**

Street: **650 Hiawatha Blvd**

City: **Syracuse** State: **NY** Zip Code: **13204-1194**

Responsible Official or Agent: **Head Operator** Phone: **(315) 635-3041**

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator
RWE/RPA
EPA Region II - Michelle Josilo
NYSEFC
IJC
NYSDOH District Office

Chief Permit Administrator: John J. Ferguson

Address: Division of Environmental Permits
625 Broadway
Albany, NY 12233-1750

Signature: [signature] Date: 6/9/14

SANITARY SEWER OVERFLOWS PROHIBITED

In accordance with 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41, bypass of the collection and treatment system without treatment are prohibited except when (1) the bypass is necessary to prevent loss of life, personal injury, public health hazard or severe property damage and (2) there is no feasible alternative to the bypass and (3) the permittee complies with the notice requirements in 6 NYCRR Part 750-2.7.

Bypassing from the following sanitary sewer overflow points in the Baldwinsville-Seneca Knolls POTW that are known to or have the potential to be bypass points is prohibited except as noted above:

Outfall	Description	Latitude Longitude	Receiving Water, Classification
100	Controlled Diversion West Pump Station Rt. 370 at Artillery Lane Baldwinsville (V)	43° 09' 39" N 76° 20' 34" W	Seneca River, Class B
101	Controlled Diversion North Pump Station Lock Street Baldwinsville (V)	43° 09' 20" N 76° 19' 40" W	Seneca River, Class B
102	Controlled Diversion South Pump Station Morgan Road Van Buren (T)	43° 08' 53" N 76° 19' 12" W	Seneca River, Class B
103	Controlled Diversion Treatment Plant Site Lysander (T)	42° 08' 28" N 76° 18' 06" W	Seneca River, Class B
104	Controlled Diversion Belgium Pump Station West River Road Lysander (T)	43° 10' 38" N 76° 10' 47" W	Seneca River, Class B

STORMWATER OUTFALLS

The following outfalls discharge on-site stormwater only, from roofs and catch basins:

Outfall	Description	Latitude/Longitude	Receiving Water
105	Stormwater runoff only from roofs and catch basins.	43° 08' 28" N 76° 18' 01" W	Wetland adjacent to Seneca River
106	Stormwater runoff only from roofs and catch basins.	43° 08' 29" N 76° 17' 57" W	Wetland adjacent to Seneca River
107	Stormwater runoff only from roofs and catch basins.	43° 08' 29" N 76° 17' 57" W	Wetland adjacent to Seneca River
108	Stormwater runoff only from roofs and catch basins.	43° 08' 29" N 76° 17' 56" W	Wetland adjacent to Seneca River
109	Stormwater runoff only from roofs and catch basins.	43° 08' 29" N 76° 17' 56" W	Wetland adjacent to Seneca River
110	Stormwater runoff only from roofs and catch basins.	43° 08' 25" N 76° 17' 49" W	Wetland adjacent to Seneca River

PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.		

PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (ML)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based standards, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This ML can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge. MONTHLY AVG (daily avg): The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week. 12 MRA (twelve month rolling avg): The average of the most recent twelve month's monthly averages. 30 DAY GEOMETRIC MEAN (30 d geo mean): The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of : the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. 7 DAY GEOMETRIC MEAN (7 d geo mean): The highest allowable geometric mean of daily discharges over a calendar week.

Note 2: ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level.

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
099	May 15 to October 15	Seneca River	07/01/2014	06/30/2019

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly average	9.0	mgd	-	-	Continuous	Recorder		X	
$CBOD_5$	Monthly average	25	mg/l	1876	lbs/d	2/week	24-hr. Comp.	X	X	(1)
$CBOD_5$	7 day average	40	mg/l	3002	lbs/d	2/week	24-hr. Comp.	X	X	
UOD	Daily maximum	112	mg/l	8400	lbs/d	2/week	24-hr. Comp.	X	X	(2)
Solids, Suspended	Monthly average	30	mg/l	2252	lbs/d	2/week	24-hr. Comp.	X	X	(1)
Solids, Suspended	7 day average	45	mg/l	3378	lbs/d	2/week	24-hr. Comp.	X	X	
Solids, Settleable	Daily Max.	0.3	ml/l	-	-	3/day	Grab	X	X	
pH	Range	6.0 to 9.0	SU	-	-	3/day	Grab	X	X	
Temperature	Daily maximum	Monitor	Deg C	-	-	3/day	Grab	X	X	
Dissolved Oxygen	Daily Minimum	2.0	mg/l	-	-	2/week	Grab		X	
Nitrogen, Ammonia Total	Daily maximum	Monitor	mg/l	-	-	1/month	24-hr. Comp.	X	X	
Nitrogen, TKN (as N)	Daily maximum	Monitor	mg/l	-	-	2/week	24-hr. Comp.	X	X	
Phosphorus, Total (as P)	Monthly average	1.0	mg/l	-	-	2/week	24-hr. Comp.		X	
Mercury, Total	Daily maximum	50	ng/l	-	-	Quarterly	Grab		X	(4)
Effluent Disinfection required: [ ] All Year [X] Seasonal from May 15 to October 15										
Coliform, Fecal	30 day geometric mean	200	No./ 100 ml	-	-	2/week	Grab.		X	
Coliform, Fecal	7 day geometric mean	400	No./ 100 ml	-	-	2/week	Grab.		X	
Chlorine, Total Residual *(Interim – effective 06/01/2014 until 5/15/2018)*	Daily Max.	2.0	mg/l	-	-	3/day	Grab		X	
Chlorine, Total Residual *(Final – becomes effective 5/15/2018)*	Daily Max.	0.8	mg/l	-	-	3/day	Grab		X	

FOOTNOTES: See page 7

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL No.	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
099	October 16 to May 14	Seneca River	07/01/2014	06/30/2019

PARAMETER	EFFLUENT LIMIT					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly average	9.0	mgd	-	-	Continuous	Recorder		X	
$CBOD_5$	Monthly average	25	mg/l	1876	lbs/d	2/week	24-hr. Comp.	X	X	(1)
$CBOD_5$	7 day average	40	mg/l	3002	lbs/d	2/week	24-hr. Comp.	X	X	
UOD	Daily maximum	-	mg/l	-	lbs/d	2/week	24-hr. Comp.	X	X	(2)
Solids, Suspended	Monthly average	30	mg/l	2252	lbs/d	2/week	24-hr. Comp.	X	X	(1)
Solids, Suspended	7 day average	45	mg/l	3378	lbs/d	2/week	24-hr. Comp.	X	X	
Solids, Settleable	Daily Max.	0.3	ml/l	-	-	3/day	Grab	X	X	
pH	Range	6.0 to 9.0	SU	-	-	3/day	Grab	X	X	
Temperature	Daily maximum	Monitor	Deg C	-	-	3/day	Grab	X	X	
Dissolved Oxygen	Daily Minimum	2.0	mg/l	-	-	2/week	Grab		X	
Nitrogen, Ammonia Total	Daily maximum	Monitor	mg/l	-	-	1/month	24-hr. Comp.	X	X	
Nitrogen, TKN (as N)	Daily maximum	Monitor	mg/l	-	-	2/week	24-hr. Comp.	X	X	
Phosphorus, Total (as P)	Monthly average	1.0	mg/l	-	-	2/week	24-hr. Comp.		X	
Mercury, Total	Daily maximum	50	ng/l	-	-	Quarterly	Grab		X	(4)
Effluent Disinfection required: [ ] All Year [ ] Seasonal from _____ to _____										
Coliform, Fecal	30 day geometric mean	NA	No./ 100 ml	-	-	2/week	Grab.			
Coliform, Fecal	7 day geometric mean	NA	No./ 100 ml	-	-	2/week	Grab.			
Chlorine, Total Residual	Daily Max.	NA	mg/l	-	-	3/day	Grab			

FOOTNOTES: See page 7

ACTION LEVELS AND MONITORING

OUTFALL No.	LEVELS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
099	All year unless otherwise noted	Seneca River	07/01/2014	06/30/2019

PARAMETER	EFFLUENT LIMIT		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max					
Iron, Total Recoverable			Monitor	lbs/day	4/year	24 hr. Comp.	
Copper, Total Recoverable			1.2	lbs/day	4/year	24 hr. Comp.	
Nickel, Total Recoverable			1.3	lbs/day	4/year	24 hr. Comp.	
Zinc, Total Recoverable			3.6	lbs/day	4/year	24 hr. Comp.	
Selenium, Total Recoverable			0.20	lbs/day	4/year	24 hr. Comp.	
Cadmium, Total Recoverable			0.14	lbs/day	4/year	24 hr. Comp.	
Chromium, Total Recoverable			0.76	lbs/day	4/year	24 hr. Comp.	
Cyanide, Total			0.52	lbs/day	4/year	8 hr. Comp.	3
Phenols, Total			1.4	lbs/day	4/year	8 hr. Comp.	3
Lead, Total Recoverable			1.7	lbs/day	4/year	24 hr. Comp.	

FOOTNOTES:

(1) Effluent shall not exceed 15 % and 15 % of influent concentration values for $CBOD_5$ & TSS respectively.
(2) Ultimate Oxygen Demand shall be computed as follows: UOD = 1.5 X $CBOD_5$ + 4.5 X TKN (Total Kjeldahl Nitrogen).
(3) Three grab samples shall be collected and combined in laboratory prior to analysis.
(4) EPA Method 1631 is required for Mercury sampling.

WHOLE EFFLUENT TOXICITY (WET) TESTING REQUIREMENTS

OUTFALL No.	LEVELS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
099	All year unless otherwise noted	Seneca River	07/01/2014	06/30/2019

PARAMETER	EFFLUENT LIMIT		PQL	MONITORING ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg.	Daily Max.	Daily Max.					
WET - Acute Invertebrate				4.8	TUa	Quarterly	See footnote	1
WET - Acute Vertebrate				4.8	TUa	Quarterly	See footnote	1
WET - Chronic Invertebrate				32	TUc	Quarterly	See footnote	1
WET - Chronic Vertebrate				32	TUc	Quarterly	See footnote	1

Footnotes:

1. Whole Effluent Toxicity (WET) Testing:

Testing Requirements - WET testing shall consist of Chronic only testing. WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 15:1 for acute, and 31:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed at the specified sample frequency for the duration of the permit during calendar years ending in 1 and 6 beginning in January and lasting for a period of one full year.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48 hr LC50) or (100)/(48 hr EC50) (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC50 or 48 hr EC50 and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent as compared to control.

The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC50 or 48 hr EC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

A. DEFINITIONS. Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section (PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS):

1. Categorical Industrial User (CIU) - an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;

2. Local Limits - General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.

3. The Publicly Owned Treatment Works (the POTW) - as defined by 40 CFR 403.3(q) and that discharges in accordance with this permit.

4. Program Submission(s) - requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by letter dated June 11, 1984.

5. Significant Industrial User (SIU) -

   a. CIUs;

   b. Except as provided in 40 CFR 403.3(v)(3), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;

   c. Except as provided in 40 CFR 403.3(v)(3), any other industrial user that contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;

   d. Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.

6. Substances of Concern - Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.

B. IMPLEMENTATION. The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:

1. Industrial Survey. To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:

   a. Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.

   b. Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.

   c. Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all significant industrial users of the POTW.

2. Control Mechanisms. To provide adequate notice to and control of industrial users of the POTW the permittee shall:

   a. Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

b. Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).

3. Monitoring and Inspection. To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:

a. Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.

b. The permittee shall adequately inspect each SIU at a minimum frequency of once per year.

c. The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.

d. Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.

4. Enforcement. To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:

a. Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.

b. Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 - 471.

c. Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(viii).

d. Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.

5. Record keeping. The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with 6 NYCRR Part 750-2.5(c).

6. Staffing. The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.

PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

C. SLUDGE DISPOSAL PLAN. The permittee shall notify NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.

D. REPORTING. The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief-Water Compliance Branch; USEPA Region II; 290 Broadway; New York, NY 10007; a periodic report that briefly describes the permittee's program activities over the previous year. This report shall be submitted to the above noted offices within 90 days of the end of the reporting period. The reporting period shall be __ANNUAL__ with reporting period(s) ending on __December 31__.

The periodic report shall include:

1. Industrial Survey. Updated industrial survey information in accordance with 40 CFR 403.12(i)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).

2. Implementation Status. Status of Program Implementation, to include:

   a. Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.

   b. Listing of significant industrial users issued permits.

   c. Listing of significant industrial users inspected and/or monitored during the previous reporting period and summary of results.

   d. Listing of significant industrial users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.

   e. Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.

   f. A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.

3. Enforcement Status. Status of enforcement activities to include:

   a. Listing of significant industrial users in Significant Non-Compliance (as defined by 40 CFR 403.8(f)(2)(viii)) with federal or local pretreatment standards at end of the reporting period.

   b. Summary of enforcement activities taken against non-complying significant industrial users. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR Part 403.8(f)(2)(viii).

BEST MANAGEMENT PRACTICES FOR SANITARY SEWER SYSTEMS WITH OVERFLOWS:

1. Dry weather overflows of the sewer system are prohibited. The occurrence of any dry weather overflow shall be promptly abated and reported to the NYSDEC regional office within 24 hours of detection. A written compliance report shall also be provided within five days of the time the permittee becomes aware of the occurrence. Such reports shall contain the information listed 6 NYCRR Part 750-2.7(d) of this permit.

2. The permittee shall optimize the sewer system by operating and maintaining it to minimize the discharge of pollutants from overflows.

3. No new source of storm water shall be connected to any separate sanitary sewer in the collection system.

4. Sanitary sewer extensions shall be designed and constructed without storm sewer interconnections.

5. The permittee shall maximize flow up to the peak design capacity to the POTW Treatment Plant during periods of wet weather.

6. The permittee shall submit to the Regional Water Engineer a Monthly Overflow Report summarizing, for each day that an overflow occurs any overflow points, an estimate of the total volume and duration of each overflow, measurements of the total amount of rainfall, a description of the source of each overflow and visual observations of water quality at each outfall. If no overflow occurs a Monthly Overflow Report is not required for that month.

7. The permittee shall conduct a maintenance and inspection program of pumping stations and the overflow facilities at outfalls No. 100 through 104. This program shall consist of minimum monthly inspections with required repair, cleaning and maintenance done as needed. This is to insure that no discharges occur during dry weather and that the maximum amount of wet weather flow is conveyed to the POTW treatment plant for treatment. All maintenance and inspection program activities including visual observations of the condition of equipment and any repair work required shall be summarized and attached with the Monthly Overflow Report.

8. By attaching a letter to the monthly operating report, the permittee shall inform the Department of all reported instances known to the permittee of sewage backing up into houses or discharge of raw sewage from surcharging manholes onto the ground surface and the conditions (wet weather, sewer blockage, etc) which caused this to occur.

9. If, there are documented, recurrent instances of sewage backing up into house(s) or discharge of raw sewage onto the ground surface from surcharging manhole(s) the permittee shall, upon letter notification from DEC, prohibit further connections, except as provided below, that would make the surcharging/backup problems worse.

   Connections may be allowed by the permittee prior to long term remediation of the problem provided that the units to be connected had received building permits prior to determination of a recurrent surcharging/backup situation; or (1) 'reasonable relief measures' have been taken to reduce infiltration/inflow flow rates and maximize sewage transmission in the area effected and (2) for each home equivalent to be connected, those measures will provide more than 5 gallons per minute (GPM) additional sewage transmission capacity to the area effected by surcharging/backup problems and (3) if long term remediation is necessary, the permittee has entered consent order negotiations or is in compliance with an enforceable (permit or consent order) schedule to eliminate the recurrent surcharging/backup problems. In the event that negotiations to enter into a consent order are unsuccessful, the DEC may, by letter notification, serve notice that all further connections that would make surcharging/backup problems worse will be prohibited.

   The 'reasonable relief measures' taken and the connections allowed shall be summarized in a letter attachment to the monthly operating report.

   'Reasonable relief measures' may include, but are not limited to, permanent disconnections of a sump pump, roof leader or a footing drain; substantial elimination of inflow and infiltration from a manhole; repair of cracked pipe, bad joint or house lateral connection; cleaning of sewage transmission devices such as sewers, force mains, and siphons; pump rehabilitation; rehabilitation of vent risers; etc.

10. The permittee shall submit an annual report summarizing implementation of the above best management practices (BMPs). The report shall list existing documentation of implementation of the BMPs and shall be submitted by March 1st of each year to the Regional Water Engineer and the Bureau of Water Permits, 625 Broadway, Albany, NY 12233-3505. The actual documentation shall be stored at the treatment plant and be made available to DEC upon request.

MERCURY MINIMIZATION PROGRAM – High Priority POTWs

1. **General** - The permittee shall develop, implement, and maintain a Mercury Minimization Program (MMP). The MMP is required because the 50 ng/L permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP will be to reduce mercury effluent levels in pursuit of the WQBEL. Note – The mercury-related requirements in this permit conform to the mercury Multiple Discharge Variance specified in NYSDEC policy *DOW 1.3.10.*

2. **MMP Elements** - The MMP shall be documented in narrative form and shall include any necessary drawings or maps. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. As a minimum, the MMP shall include an on-going program consisting of: periodic monitoring designed to quantify and, over time, track the reduction of mercury; an acceptable control strategy for reducing mercury discharges via cost-effective measures, which may include more stringent control of tributary waste streams; and submission of periodic status reports.

A. Monitoring - The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. All permit-related wastewater and stormwater mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples shall be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls. Minimum required monitoring is as follows:

i. Sewage Treatment Plant Influent & Effluent, and Type II SSO Outfalls - Samples at each of these locations must be collected in accordance with the minimum frequency specified on the mercury permit limits page.

ii. Key Locations in the Collection System and Potential Significant Mercury Sources - The minimum monitoring frequency at these locations shall be semi-annual. Monitoring of properly treated dental facility discharges is not required.

iii. Hauled Wastes - Hauled wastes which may contain significant mercury levels must be periodically tested prior to acceptance to ensure compliance with pretreatment/local limits requirements and/or determine mercury load.

iv. Additional monitoring must be completed as may be required elsewhere in this permit or upon Department request.

B. Control Strategy - An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, including but not limited to more stringent control of industrial users and hauled wastes. The control strategy will become enforceable under this permit and shall contain the following minimum elements:

i. Pretreatment/Local Limits - The permittee shall evaluate and revise current requirements in pursuit of the goal.

ii. Periodic Inspection - The permittee shall inspect users as necessary to support the MMP. Each dental facility shall be inspected at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6NYCRR Part 374.4. Other mercury sources shall also be inspected once every five years. Alternatively, the permittee may develop an outreach program which informs these users of their responsibilities once every five years and is supported by a subset of site inspections. Monitoring shall be performed as above.

iii. Systems with CSO & Type II SSO Outfalls - Priority shall be given to controlling mercury sources upstream of CSOs and Type II SSOs through mercury reduction activities and/or controlled-release discharge. Effective control is necessary to avoid the need for the Department to establish mercury permit limits at these outfalls.

iv. Equipment and Materials – Equipment and materials which may contain mercury shall be evaluated by the permittee and replaced with mercury-free alternatives where environmentally preferable.

C. Annual Status Report - An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year; and, (e) progress toward the goal. The first annual status report is due one year after the permit is modified to include the MMP requirement and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation, including the dental forms required by 6NYCRR Part 374.4, which shall be available for review by NYSDEC representatives. Copies shall be provided upon request.

3. **MMP Modification** - The MMP shall be modified whenever: (a) changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or, (d) pursuant to a permit modification.

STORM WATER POLLUTION PREVENTION PLAN FOR POTWs WITH STORMWATER OUTFALLS

1. General - The Department has determined that stormwater discharges from POTWs with design flows at or above 1 mgd shall be covered under the SPDES permit. If the permittee has already submitted a Notice of Intent to the Department for coverage under the General Storm Water permit, the permittee shall submit a Notice of Termination to the Department upon receipt of this final SPDES permit containing the requirement to develop a SWPPP.

The permittee is required to develop, maintain, and implement a Storm Water Pollutant Prevention Plan (SWPPP) to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and other stormwater discharges including, but not limited to, drainage from raw material storage.

The SWPPP shall be documented in narrative form and shall include the 13 minimum elements below and plot plans, drawings, or maps necessary to clearly delineate the direction of stormwater flow and identify the conveyance, such as ditch, swale, storm sewer or sheet flow, and receiving water body. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the SWPPP and may be incorporated by reference. A copy of the current SWPPP shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. Compliance Deadlines - The SWPPP shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the SWPPP is inadequate, or (c) a letter from the Department identifies inadequacies in the SWPPP. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All SWPPP revisions (with the exception of minimum elements - see item (4.B.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the SWPPP (or of any minimum elements) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. Facility Review - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at *http://www.dec.state.ny.us/website/dcs/permits/olpermits/form2c.pdf*) as well as those that are required to be monitored by the SPDES permit.

4. A. 13 Minimum elements - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify Best Management Practices (BMPs) that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of minimum elements of the SWPPP and BMPs is available in *Developing Your Stormwater Pollution Prevention Plan – A Guide for Industrial Operators,* February 2009, EPA 833-B-09-002. At a minimum, the plan shall include the following elements:

1. Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification & Assessment
4. Employee Training
5. Inspections and Records
6. Security
7. Preventive Maintenance
8. Good Housekeeping
9. Materials/Waste Handling, Storage, & Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

STORM WATER POLLUTION PREVENTION PLAN FOR POTWs WITH STORMWATER OUTFALLS (continued)

Note that for some facilities, especially those with few employees, some of the above may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the SWPPP that do not apply to your facility, along with an explanation, for instance if street sweeping did not apply because no streets exist at the facility.

B. Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters - As part of the erosion of and sediment control element, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters.

The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual*, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity at least 30 days prior to soil disturbance. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at *www.dec.state.ny.us/website/dow/toolbox/swforms.html*) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP is properly implemented.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) Except as provided in (c) and (g) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed before initiation of any discharge.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address :

NYSDEC Division of Water Regional Phone: ( ) - ### -####

(e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years.

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

DISCHARGE NOTIFICATION REQUIREMENTS (continued)

(g) All requirements of the Discharge Notification Act, including public repository requirements, are waived for any outfall meeting any of the following circumstances, provided Department notification is made in accordance with (h) below:

(i) such sign would be inconsistent with any other state or federal statute;

(ii) the Discharge Notification Requirements contained herein would require that such sign could only be located in an area that is damaged by ice or flooding due to a one-year storm or storms of less severity;

(iii) instances in which the outfall to the receiving water is located on private or government property which is restricted to the public through fencing, patrolling, or other control mechanisms. Property which is posted only, without additional control mechanisms, does not qualify for this provision;

(iv) instances where the outfall pipe or channel discharges to another outfall pipe or channel, before discharge to a receiving water; or

(v) instances in which the discharge from the outfall is located in the receiving water, two-hundred or more feet from the shoreline of the receiving water.

(h) If the permittee believes that any outfall which discharges wastewater from the permitted facility meets any of the waiver criteria listed in (g) above, notification (form enclosed) must be made to the Department's Bureau of Water Permits, Central Office, of such fact, and, provided there is no objection by the Department, a sign and DMR repository for the involved outfall(s) are not required. This notification must include the facility's name, address, telephone number, contact, permit number, outfall number(s), and reason why such outfall(s) is waived from the requirements of discharge notification. The Department may evaluate the applicability of a waiver at any time, and take appropriate measures to assure that the ECL and associated regulations are complied with.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Parameter(s) Affected	Interim Effluent Limit(s)	Compliance Action	Due Date
099	Chlorine, Total Residual	2.0 mg/l	Interim Permit Limit	Effective 07/01/2014 to May 15, 2018
099	Chlorine, Total Residual	-	Permittee must provide plans to the Department for achieving final permit limit	04/01/2015
099	Chlorine, Total Residual	-	Permittee must provide status report to the Department documenting progress toward achieving final permit limit.	01/01/2016 (see note (b) below)
099	Chlorine, Total Residual	0.8 mg/l (final)	Final Permit Limit	Effective May 15, 2018

The above compliance actions are one time requirements. The permittee shall comply with the above compliance actions to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The above due dates are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

b) For any action where the compliance date is greater than 9 months past the previous compliance due date, the permittee shall submit interim progress reports to the Department every nine (9) months until the due date for these compliance items are met.

c) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. A description or any factors which tend to explain or mitigate the non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

d) The permittee shall submit copies of any document required by the above schedule of compliance to the NYSDEC Regional Water Engineer at the location listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS and to the Bureau of Water Permits, 625 Broadway, Albany, N.Y. 12233-3505, unless otherwise specified in this permit or in writing by the Department.

SPECIAL CONDITIONS: Schedule of Submittals

The permittee shall submit the following information to the Regional Water Engineer at the address listed on the Recording, Reporting and Monitoring page of this Permit, and to the Bureau of Water Permits, 625 Broadway, Albany NY 12233-3505:

Outfall	Required Action	Due Date	FN
099	Mercury Minimization Program: Submit annual status report by April 1st of each calendar year (for the previous year) with follow-up reports due annually thereafter. Whole Effluent Toxicity Testing: WET testing shall be performed at the specified sample frequency during calendar years ending in 1 and 6 beginning in January and lasting for a period of one full year.	Annually, by April 1st Years ending in 1 and 6	

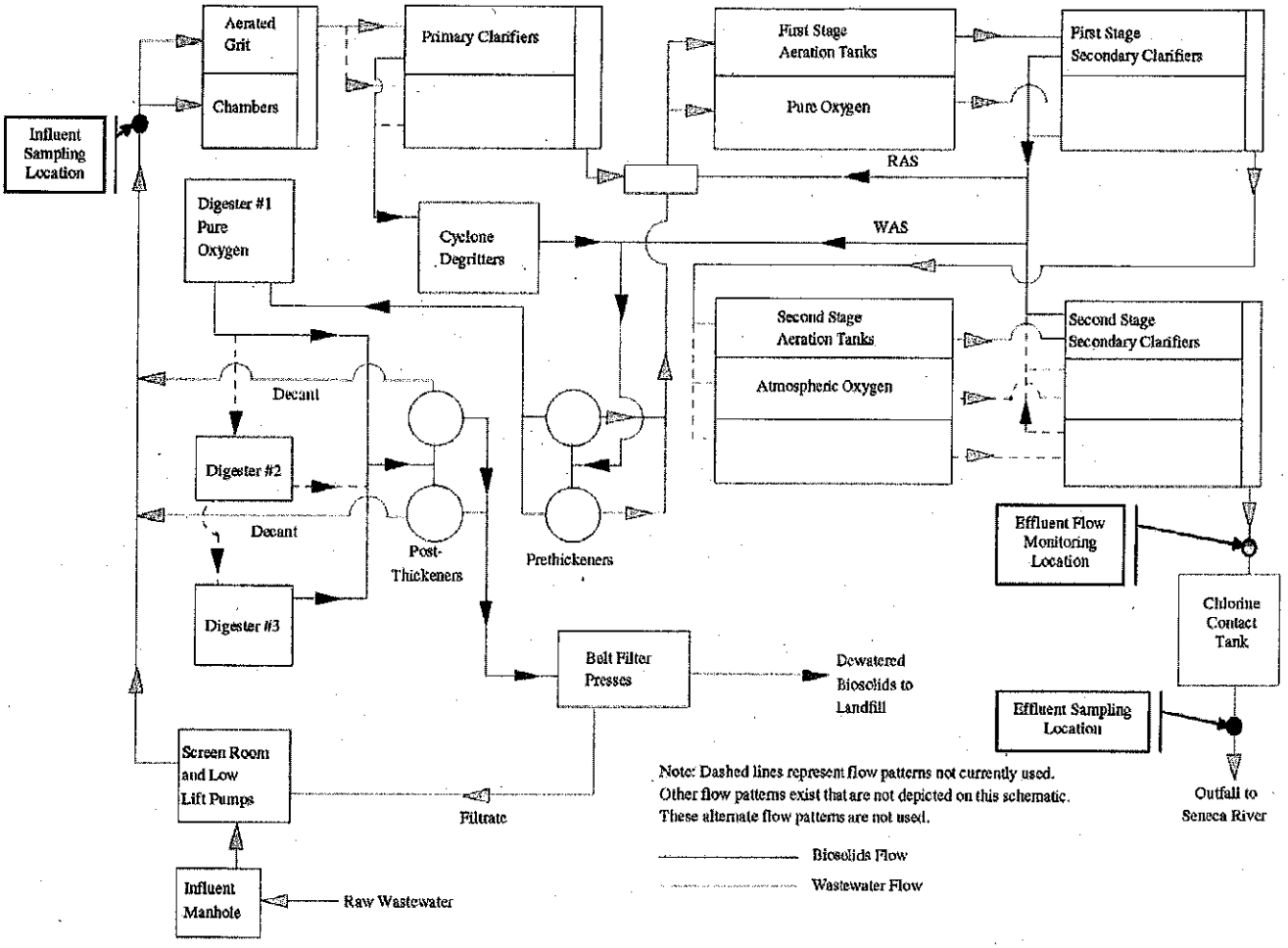
Notes:

1. The permittee shall make every effort to comply with the above dates. Requests for extension, with justification, may be made to the Regional Water Engineer at the address listed above. Failure to submit either the information requested or a request for an extension by the dates listed above shall constitute noncompliance with this Permit.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:

Baldwinsville Seneca Knolls WWTP Current Operational Flow Schematic



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR Part 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR Part 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR Part 750-2.1(g)
4.	Duty to mitigate	6 NYCRR Part 750-2.7(f)
5.	Permit actions	6 NYCRR Part 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR Part 750-2.2(b)
7.	Duty to provide information	6 NYCRR Part 750-2.1(i)
8.	Inspection and entry	6 NYCRR Part 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR Part 750-2.8
2.	Bypass	6 NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR Part 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR Part 750-2.5(a)(2), 2.5(c)(1), 2.5(c)(2), 2.5(d) & 2.5(a)(6)
2.	Signatory requirements	6 NYCRR Part 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements	6 NYCRR Part 750-2.5, 2.6, 2.7 & 1.17
2.	Anticipated noncompliance	6 NYCRR Part 750-2.7(a)
3.	Transfers	6 NYCRR Part 750-1.17
4.	Monitoring reports	6 NYCRR Part 750-2.5(e)
5.	Compliance schedules	6 NYCRR Part 750-1.14(d)
6.	24-hour reporting	6 NYCRR Part 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR Part 750-2.7(e)
8.	Other information	6 NYCRR Part 750-2.1(f)
9.	Additional conditions applicable to a POTW	6 NYCRR Part 750-2.9
10.	Special reporting requirements for discharges that are not POTWs	6 NYCRR Part 750-2.6

F. Planned Changes

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

   a. The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

   In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

GENERAL REQUIREMENTS continued

G. Notification Requirement for POTWs

1. All POTWs shall provide adequate notice to the Department and the USEPA of the following:
   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on:
      i. the quality and quantity of effluent introduced into the POTW, and
      ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

H. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

I. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the Department.
2. The permittee shall **maintain a logbook** of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
3. The permittee shall **submit a completed *WTC Annual Report Form*** each year that they use and discharge WTCs. This form shall be attached to either the December DMR or the annual monitoring report required below.

The *WTC Notification Form* and *WTC Annual Report Form* are available from the Department's website at http://www.dec.ny.gov/permits/93245.html .

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

[X] (if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

[ ] (if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

[X] (if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:
[X] Regional Water Engineer and/or [ ] County Health Department or Environmental Control Agency specified below

Send the **original** (top sheet) of each DMR page to:
Department of Environmental Conservation
Division of Water, Bureau of Water Compliance
625 Broadway, Albany, New York 12233-3506
Phone: (518) 402-8177

Send the **first copy** (second sheet) of each DMR page to:
Department of Environmental Conservation
Regional Water Engineer, Region 7
615 Erie Blvd West
Syracuse, New York 13204-2400

(315) 426-7500

Send an **additional copy** of each DMR page to:

B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

C. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

D. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

E. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

F. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

Municipal SPDES Permit Fact Sheet

I. SUMMARY OF PROPOSED PERMIT CHANGES

A SPDES permit renewal is proposed for this facility. Following is a summary of the changes in the permit as compared to the currently effective permit, the details of these changes are specified below and in the final permit:

1. Added stormwater outfalls table listing on-site stormwater only outfalls from roofs and catch basins (page 3 of permit) that were identified in the SPDES permit application.
2. As is required by the Division of Water's TOGS 1.3.10 the 50 ng/l action level for Mercury has been changed to a permit limit of 50 ng/l. The monitoring frequency remains the same (quarterly).
3. The seasonal calculated water quality based effluent limit for Total Residual Chlorine has been reduced (from 2.0 mg/l to 0.8 mg/l).
4. Water Quality Based Effluent Limit of 2.0 mg/l (daily minimum) for Dissolved Oxygen has been added to the permit for Outfall 099.
5. The Action Levels have been adjusted based on the results of the statistical analysis of the Baldwinsville-Seneca Knolls WWTP using the Projected Effluent Quality (PEQ) process outlined in TOGS 1.3.3. It should be noted that an action level is a numerical reporting level, accompanied by monitoring requirements. It is **not** an effluent limit. It is a triggering mechanism which, if exceeded, requires the permittee to notify the Department of such exceedence. The Department reviews the exceedence to determine the need for permit modification, to either increase the action level or to require a water quality based effluent limitation (WQBEL). The permit has been revised accordingly to reflect the updated action levels.
6. Since the permit and SPDES permit application include sanitary sewer overflow points (outfalls 100-104) Best Management Practices for Sanitary Sewer Systems with Overflows requirements have been added to the permit (page 12 of permit).
7. Discharge Notification Act Requirements have been retained but updated. The updated pages can be found on page 17 of the permit.
8. Schedule of Submittals and Schedule of Compliance pages have been added to the permit.

Please note that when the Department updates a permit this typically includes updated forms incorporating the latest general conditions.

II. BACKGROUND INFORMATION

As noted throughout this document, SPDES permits are based on both federal and state requirements - law, regulation, policy, and guidance. These can generally be found on the internet. Current locations include: Clean Water Act (CWA) *www.epa.gov/lawsregs/laws/index.html#env*; Environmental Conservation Law (ECL) *www.dec.ny.gov/regulations/40195.html*; federal regulations *www.gpo.gov/fdsys/browse/collectionCfr.action?collectionCode=CFR*; state environmental regulations *www.dec.ny.gov/regulations/regulations.html*; NYSDEC water policy *www.dec.ny.gov/regulations/2654.html*.

A. Administrative History

The current SPDES permit for the facility became effective on 9/01/2007 and has an expiration date of 8/30/2012 and underwent a full technical review and was modified on 7/01/2009.

On 02/29/2012 the permittee submitted a permit renewal application form NY-2A and sampling data.

B. Outfall and Receiving Water Information

The facility discharges, or proposes to discharge, wastewater and/or stormwater to waters of the state via the following outfalls:

The Baldwinsville-Seneca Knolls WWTP discharges treated sewage through Outfall 099 to the Seneca River. The Baldwinsville WWTP has a design flow of 9.0 MGD and provides advanced secondary treatment of wastewater from the Village of Baldwinsville, and the Towns of Lysander, Van Buren, and Geddes. Wastewater influent is primarily from residential sources.

The Baldwinsville WWTP is designed with a pure oxygen activated sludge system with aerobic sludge digestion. The facility can be operated as either single or two-stage pure oxygen activated sludge process, with single stage being the mode of choice. Pure oxygen is generated onsite and used in the aeration basins and aerobic digester. This facility also has an onsite biofilter to control odors from the raw influent and a biosolids dewatering facility equipped with belt presses. Total Phosphorus is removed all year around with the use of ferrous chloride, while sodium hypochlorite disinfection and nitrification are seasonal.

The treatment plant consists of two (2) mechanical bar screens, two (2) aerated grit chambers, two (2) primary settling tanks, five (5) aeration tanks, five (5) final settling tanks, two (2) chlorine contact tanks, and two (2) aerobic digesters.

The draft permit details known and possible Sanitary Sewer Overflows (SSOs) within the collection system tributary to the collection system. Bypass from these outfalls is prohibited except as noted in 6 NYCRR Part 750-2.8(b)(2) and 40 CFR 122.41. These SSOs are identified as Outfall(s) 100-104. No treatment is provided for these outfall(s).

Facility Stormwater Collection and Conveyance System Description –

> The Baldwinsville-Seneca Knolls WWTP was built on a hillside next to a small flood plain along the Seneca River. Excavation was used to back fill the new construction and level the site. However, a large hill still slopes toward the treatment plant; as such significant stormwater management was incorporated into the site development. Large concrete drainage ditches line the access road and tie in with the catch basins to alleviate flooding. The facility has a total of twenty (20) catch basins, eight (8) which drain to Outfall # 110 and eight (8) which drain to Outfall # 105, and one (1) catch basin each to Outfalls # 106, # 107, # 108 and #109. Stormwater is also collected from seven (7) roof drains on some operational buildings and is directed to the same piping used for the catch basins. Other buildings and decks on the facility drain stormwater into the process flows, and some runoff drains into the lowland forest then to the river. These uncollected flows are a small fraction of the stormwater. The six (6) stormwater outfalls discharge runoff from areas of paved roadway, roof drains and grassed lawn areas. Five (5) outfalls discharge water onto the lowland next to the river. Outfall # 105 differs from the others as it discharges into the river via a covered concrete channel. This channel also serves to discharge the plant Influent bypass; Outfall # 103, which is for emergency use only.

The location of the main outfall(s), and the name, classification, and index numbers of the receiving waters are indicated in the *Outfall & Receiving Water Location Table* at the end of this fact sheet. The classifications of individual surface waters are specified in 6 NYCRR Parts 800 – 941. The best uses and other requirements applicable to the specific water classes are specified in 6 NYCRR Part 701.

The 7Q10 flow was obtained from NYSDEC Water Quality files. The 30Q10 flow was obtained from the same source. Mixing zone analyses are conducted assuming complete mixing. Other critical receiving water data for Temperature, pH, hardness and/or salinity were based on conservative estimates. This flow information is listed in the *Pollutant Summary Table* at the end of this fact sheet together with applicable ambient water quality criteria, ambient background data (if available), and outfall pollutant data.

Impaired Waterbody Information – The CWA requires states to identify impaired waters, where designated uses are not fully supported. For these impaired waters/pollutants, states must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) restricting waterbody uses. As of 2012 the Seneca River in Baldwinsville was listed as impaired due to Oxygen Demand from invasive species.

C. Discharge Composition

The *Pollutant Summary Table* at the end of this fact sheet presents the existing effluent quality of the facility. Concentration and mass data are presented, based on Discharge Monitoring Report (DMR), permit application, and possibly other data submitted by the permittee for the period July 2009 to August 2012. The statistical methods utilized to calculate 95th and 99th percentiles are in accordance with TOGS 1.2.1 and the USEPA, Office of Water, Technical Support Document For Water Quality-based Toxics Control, March 1991, Appendix E. Statistical calculations were not performed for parameters with insufficient data. Generally, ten or more data points are needed to calculate percentiles (See TOGS 1.2.1 Appendix D). Non-detects were excluded from the statistical calculations.

D. Compliance History

A review of the facility's DMRs and other compliance information from July 2009 to August 2012 shows that the facility had the following violations:

Parameter	Date	Permit Limit	Reported Concentration
Total Residual Chlorine	July 2011	2.0 mg/l	2.3 mg/l

III. PROPOSED PERMIT REQUIREMENTS

Sections 101, 301(b), 304, 308, 401, 402, and 405 of the Clean Water Act (CWA) provide the basis for the effluent limitations and other conditions in the draft permit. The NYSDEC evaluates discharges with respect to these sections of the CWA, New York State Environmental Conservation Law, and the relevant federal/state regulations, policy, and guidance to determine which conditions to include in the draft permit.

For existing permittees, the previous permit typically forms the basis for the next permit. Permit revisions are implemented where justified due to changed conditions at the facility and/or in response to updated regulatory requirements.

A. Effluent Limitations

If applicable, the existing permit limits are evaluated to determine if these should be continued, revised, or deleted. Generally, existing limits are continued unless there is justification to do otherwise. Other pollutant monitoring data are also reviewed to determine the presence of additional contaminants that should be included in the permit.

The permit writer determines the **technology-based effluent limits (TBELs)** that must be incorporated into the permit. A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies and/or Best Management Practices (BMPs). The Department then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in

the receiving water might result. If there is a reasonable potential for exceedances to occur, **water quality-based effluent limits (WQBELs)** must be included in the permit. A WQBEL is designed to ensure that the water quality standards of receiving waters are being met. In general, the Clean Water Act requires that the effluent limits for a particular pollutant are the more stringent of either the TBEL or WQBEL.

1. TBELs & Anti-Backsliding:

Sections 301(b)(1)(B) and 304(d)(1) of the CWA require technology-based controls, known as secondary treatment, on POTW effluents. The applicable federal regulations are specified in 40 CFR Part 133.102. These and other requirements are summarized in TOGS 1.3.3.

Anti-backsliding requirements are specified in the CWA, sections 402(o) and 303(d)(4), and regulations at 40 CFR 122.44(l). These requirements are summarized in TOGS 1.2.1. Generally, the regulations prohibit the relaxation of effluent limits in reissued permits unless one of the specified exceptions applies. In practice, limits in reissued permits will generally be no less stringent than previous permit limits to ensure compliance with anti-backsliding requirements. Otherwise, the specific exceptions that allow backsliding will be cited on a case-by-case basis.

Following is the TBEL & Anti-backsliding assessment for each pollutant present in the discharge(s). A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific TBEL & Anti-Backsliding Analysis:

In addition to the concentration limits noted below, 40 CFR 122.45(f) requires that SPDES permits contain mass-based limits for most pollutants. Mass-based limits in lbs/day are derived by multiplying the design flow in MGD by the concentration limit in mg/L by a conversion factor of 8.34. Limits are typically expressed using two significant figures.

Outfall 099

Flow – Consistent with TOGS 1.3.3, a monthly average flow limit of 9.0 MGD is specified, which is equal to the design capacity of the treatment plant.

pH range – 40 CFR 133.102 requires that the effluent pH be within the range of 6.0 to 9.0 standard units (SU).

Temperature – Monitoring is required for process control and informational purposes.

Dissolved Oxygen – Monitoring is required for process control and informational purposes.

5 day Carbonaceous Biochemical Oxygen Demand (CBOD5) – 40 CFR 133.102 requires that the 30 day (monthly) average be limited to 25 mg/L, the 7-day (weekly) average be limited to 40 mg/L, and the minimum monthly average percent removal be 85%.

Total Suspended Solids (TSS) – 40 CFR 133.102 requires that the 30 day (monthly) average be limited to 30 mg/L, the 7-day (weekly) average be limited to 45 mg/L, and the minimum monthly average percent removal be 85%.

Settleable Solids – In accordance with TOGS 1.3.3 a limit of 0.3 is specified.

Phosphorus – Based on TOGS 1.3.3, for a POTW which discharges to Lakes Erie or Ontario or their respective drainage basins and are not subject to more stringent requirements under TOGS 1.3.6 a permit limit of 1.0 mg/l has been retained in the permit.

Fecal Coliform – Based on TOGS 1.3.3, for a discharge to a Class B water seasonal disinfection is required. See WQBEL section.

Total Residual Chlorine (TRC) – Effluent disinfection is required as noted below in the WQBEL section. Based on TOGS 1.3.3, a daily maximum limit of 2.0 mg/l is appropriate. This limit prevents excessive use of chlorine while maintaining an appropriate process control indicator for effective disinfection. See WQBEL section for additional information on the revised TRC limit. The current permit limit of 2.0 mg/l shall remain as an interim limit until May 15, 2018 when the final WQBEL becomes effective.

Mercury – See WQBEL section below.

2. WQBELs & Anti-Degradation:

In addition to the TBELs previously discussed, the NYSDEC evaluated the discharge to determine compliance with Sections 101 and 301(b)(1)(C) of the CWA and 40 CFR 122.44(d)(1). These require that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality. The limits must be stringent enough to ensure that water quality standards are met and must be consistent with any available wasteload allocation (WLA).

The procedure for developing WQBELs includes knowing the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. Factors also considered in this analysis include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources. If the expected concentration of the pollutant of concern in the receiving water may exceed the ambient water quality standard or guidance value then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL or WLA for the pollutant is required.

Antidegradation Policy: New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, entitled "Water Quality Antidegradation Policy," signed by the Commissioner of NYSDEC, dated September 9, 1985; and, (2) TOGS 1.3.9, entitled "Implementation of the NYSDEC Antidegration Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985)." A SPDES permit cannot be issued that would result in the water quality criteria being violated. The permit for the facility contains effluent limits which ensure that the existing beneficial uses of the receiving waters will be maintained.

Following is the WQBEL analysis for each pollutant present in the discharge(s). Anti-degradation analysis which justifies applying water quality standards of a higher classification is noted below, if applicable. Refer to section II.B. above for information on discharge location, receiving water information (class, dilution, chemistry), and the existence of any TMDLs. A summary of this analysis is provided in the *Pollutant Summary Table* at the end of this fact sheet.

Pollutant-Specific WQBEL & Anti-Degradation Analysis:

Outfall 099

pH range – The dilution ratio is at least 1:1 so a limit equal to the TBEL is appropriate.

Temperature – The discharge is to non-trout waters and, typical of STPs, existing effluent quality is below 90 F. Therefore, a limit is not necessary (see 6 NYCRR 704.2(b)(1)(i)).

Ultimate Oxygen Demand (UOD) – The seasonal (May 15 to Oct 15) daily maximum water based effluent limit for UOD of 112 mg/l (8400 lbs/day) has been retained in the permit.

Dissolved Oxygen (minimum) – a WQBEL limit of 2.0 mg/l has been added to the permit

Total Suspended Solids (TSS) – The TBEL limit has been retained in the draft permit.

Settleable Solids – The narrative water quality standards provided in 6 NYCRR Part 703.2 state that the discharge of settleable solids shall not cause deposition or impair the receiving waters for their best usages. At dilution ratios less than 10:1 a daily maximum WQBEL of 0.1 ml/l is required. Otherwise, the TBEL is sufficient.

Total Kjeldahl Nitrogen/Ammonia – As per TOGS 1.3.3 all POTWs with a design flow of 1.0 MGD or greater monitor for influent and effluent TKN and Ammonia. These requirements are being retained from the previous permit.

Phosphorus – The current permit limit of 1.0 mg/l will be retained. TOGS 1.3.3 requires, for POTWs which discharge to Lakes Erie or Ontario or their respective drainage basins and are not subject to more stringent requirements under TOGS 1.3.6, New York State's implementation of the 1987 Great Lakes Water Quality Agreement (GLWQA) by the International Joint Commission (IJC) requires that the effluent concentration of total phosphorus be limited to 1.0 mg/l on an average 30 day basis.

Fecal Coliform – In accordance with TOGS 1.3.3, seasonal effluent disinfection is required because the discharge is to a class B water body. Geometric mean limits of 200/100 ml monthly average and 400/100 ml weekly average are specified.

Total Residual Chlorine (TRC) – A daily maximum TRC WQBEL of 800 ug/L (or 0.8 mg/l) was determined by multiplying the water quality standard of 5 ug/L by the decay factor of 5 and the chronic dilution ratio of 32. See also TOGS 1.3.1.E. The current limit of 2.0 mg/l will remain in effect as an interim limit until May 15, 2018.

Mercury – The current permit includes a limit of 50 ng/l for Mercury. Mercury is has been detected in the effluent at a maximum value of 20 ng/L, which exceeds the water quality standard of 0.7 ng/L. New York State's mercury multiple discharge variance (MDV) in TOGS 1.3.10 is being applied. Consequently, the permit continues to include a 50 ng/L effluent limit; a mercury minimization program requirement; and routine monitoring using EPA Method 1631. Refer to TOGS 1.3.10 for further detail.

Whole Effluent Toxicity (WET) Testing - WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.

3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. Treatment plants which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs < 1 MGD which are managing industrial pretreatment programs.

A Reasonable Potential analysis was performed, including an evaluation of the discharge against the seven criteria noted above. Criteria applicable to the discharge include number(s) 4 and 7. Based upon this evaluation, WET testing action levels of 4.8 TUa and 32 TUc have been retained in the draft permit for each species. The chronic limit/action level is equal to the chronic dilution ratio. The acute limit/action level is equal to 50% of the chronic dilution ration multiplied by 0.3. Refer to the SPDES permit for details.

The review of quarterly Tier 2 Chronic toxicity test data submitted for a period of one year by Baldwinsville-Seneca Knolls STP SPDES# NY0030571 at Outfall 099 between March and November 2011 was completed (please see summary table below). The toxicity testing was conducted by the facility's contracted laboratory AquaTOX Research, Inc. using the vertebrate fathead minnow (*Pimephales promelas*) and invertebrate water flea (*Ceriodaphnia dubia*) freshwater test species.

All of the tests indicated that the effluent was not chronically toxic with NOEC results ≥100% and corresponding TUc results ≤1.0 for both species tested. Although the IC25 results were indicative of some chronic toxicity, the effluent is not predicted to be acutely or chronically toxic after mixing with the receiving water of the Class B Seneca River at the Instream Waste Concentration (IWC).

Therefore, due to no exceedances of the toxicity based action levels, additional toxicity testing is not required at this time unless the permit is modified, renewed or 2016, as all current requirements have been satisfactorily met as specified in permit. Additionally, application of the Reasonable Potential Determination (RPD) to the acute and chronic results indicates that toxicity based limits are also not required at this time.

Test Date	[1]MSS 48H LC50 (%Effluent)	[2]MSS TUa	[3]TUa Action Level	[4]MSS Survival 100% Effluent	[5]Acute Test Result	[6]MSS RPD TUa	[7]Acute WET Limit Required	[8]MSS 7D NOEC/IC25 (%Effluent)	[9]MSS NOEC/IC25 TUc	[10]TUc Action Level	[11]Chronic Test Result	[12]MSS RPD TUc	[13]Chronic WET Limit Required
03/11	>100% (FI)	<0.3 (FI)	4.8	100% (FI)	Pass	<0.8	No	>100/90.7% (I)	<1.0/1.1 (I)	32.0	Pass	2.9	No
06/11	>100% (FI)	<0.3 (FI)	4.8	97.5% (F)	Pass	<0.8	No	>100/>100% (FI)	<1.0/<1.0 (FI)	32.0	Pass	<2.6	No
08/11	>100% (FI)	<0.3 (FI)	4.8	97.5% (F)	Pass	<0.8	No	>100/>100% (FI)	<1.0/<1.0 (FI)	32.0	Pass	<2.6	No
11/11	>100% (FI)	<0.3 (FI)	4.8	100% (FI)	Pass	<0.8	No	>100/70.5% (I)	<1.0/1.4 (I)	32.0	Pass	3.6	No

[1]Most Sensitive Species 48-hour Lethal Concentration: (F=Fish; I=Invertebrate) is the concentration or percentage of effluent that is lethal to 50% of the exposed organisms over a 48-hour period, and often indicates one species is more sensitive than the other during effluent testing.

[2]Most Sensitive Species Toxic Units Acute: is calculated as (100 / MSS 48H LC50). However, because ≤ 0.3 TUa is defined as the acceptable amount of acute toxicity at the edge of the acute mixing zone, and mathematically 100 / 100 = 1.0 (i.e. a "failing result"), non-toxic acute test results are indicated as < 0.3.

[3]Toxic Unit Acute Action Level: is calculated as [(Acute Dilution Factor+1) x 0.3 TUa] representing the maximum allowable effluent TUa at the edge of the acute mixing zone after mixing with the receiving water and using the seven-day once-in-ten year low flow (7Q10), to assure acute protection of the receiving water.

[4]Most Sensitive Species Survival in 100% Effluent: is the lowest percentage of surviving organisms in 100% effluent, providing additional evidence of unacceptable acute toxicity when the necessary 50% or greater mortality required to generate an LC50 has not been attained. *Denotes statistically significant mortality in 100% effluent as compared to the control.

[5]Acute Test Result: MSS TUa ≤ TUa Action Level for passing effluent test result and MSS TUa > TUa Action Level for a failing effluent test result. If unacceptable mortality (i.e. statistically significant as compared to the control) is noted in 100% effluent, this may also be considered a failing test result.

[6]Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as (MSS TUa x 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity based action level.

[7]Acute Whole Effluent Toxicity Limit Required: MSS RPD TUa ≤ TUa Action Level, then no toxicity based limit is required and the action level remains in place. If MSS RPD TUa > TUa Action Level, then a toxicity based limit is required and the action level becomes the limit.

[8]Most Sensitive Species 7-day No Observed Effect Concentration or 25% Inhibition Concentration: is the highest concentration or percentage of effluent tested that causes no statistically significant effect to the exposed test organisms as compared to the control over a 7-day period, or the concentration or percentage of effluent that causes a 25% reduction in reproduction or growth for the test population.

[9]Most Sensitive Species Toxic Units Chronic: is calculated as (100 / MSS 7D NOEC) or (100 / MSS 7D IC25).

[10]Toxic Unit Chronic Action Level: is calculated as [(Chronic Dilution Factor+1) x 1.0 TUc] representing the maximum allowable effluent TUc at the edge of the chronic mixing zone after mixing with the receiving water and using the seven-day once-in-ten year low flow (7Q10), to assure chronic protection of the receiving water.

[11]Chronic Test Result: MSS TUc ≤ TUc Action Level for passing effluent test result and MSS TUc > TUc Action Level for a failing effluent test result.

[12]Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as (MSS TUc x 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity based action level.

[13]Chronic Whole Effluent Toxicity Limit Required: MSS RPD TUc ≤ TUc Action Level, then no toxicity based limit is required and the action level remains in place. If MSS RPD TUc > TUc Action Level, then a toxicity based limit is required and the action level becomes the limit.

B. Monitoring & Reporting Requirements

Section 308 of the Clean Water Act and federal regulations 40 CFR 122.44(i) require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and for reporting results on DMRs. The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

C. Other Conditions Specific To This Permit

Compliance Schedule(s): The current schedule of submittals page has been retained in the permit which outlines requirements for the submission of a Mercury Minimization Program and Whole Effluent Toxicity Testing. A compliance schedule page has been added which includes interim and final milestone dates for the final Total Residual Chlorine limit of 0.8 mg/l.

Industrial Pretreatment Program: The permittee is required to implement a Pretreatment Program in accordance with 40 CFR 403. The program specifies development of an industrial user compliance program, submission of user information, modification of local sewer use law (if necessary), and periodic reporting. This requirement is based on 40 CFR 403 and TOGS 1.3.3 and is being continued from the previous permit. The current Industrial Pretreatment Program was approved on June 11, 1984.

Water Treatment Chemicals (WTCs): The use and discharge of WTCs requires the prior review and authorization by the NYSDEC. In most cases, a permit modification is not necessary. WTC usage must be logged and detailed in an annual report sent to the DEC. The permit lists any authorized WTCs for the facility.

Pollutant Minimization Program (PMP): A PMP for Mercury is being implemented at the facility because the WQBEL of 0.7 ng/L is lower than the compliance limit of 50 ng/L. The goal of the PMP is to meet the calculated WQBEL. This requirement is being continued from the previous permit.

Discharge Notification Act: In accordance with Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters. The permittee is also required to provide a public repository for DMRs as required by the SPDES permit. This requirement is being retained, but updated, compared to the previous permit.

Stormwater Pollution Prevention Plan: The permittee is required to develop and maintain a stormwater pollution prevention plan to minimize contamination of stormwater run-off from the facility. This requirement is being continued from the previous permit.

Best Management Practices for Sanitary Sewer Systems with Overflows: Requirements have been added prohibiting dry weather overflows of the sewer system from Outfalls 100 – 104.

Schedule of Compliance: Schedule of Compliance page added to the permit outlining interim and final effective dates for total residual chlorine limits.

D. General Conditions Applicable To All Permits

The permit contains standard regulatory language that is required to be in all SPDES permits. These permit provisions, based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750, include requirements pertaining to monitoring, recording, reporting, and compliance responsibilities. These "general conditions" of permits are typically specified, summarized, or referenced on the first and last pages of the permit.

OUTFALL & RECEIVING WATER LOCATION TABLE

Outfall Information					Receiving Water Information								
	Latitude	Longitude	Flow Rate (MGD)					*For use by WQ Engineer* - Critical Data					
Outfall #	°, ', "	°, ', "	Average	Design	Name	Class	Water Index Number	7Q10 (MGD)	30Q10 (MGD)	Dilution/ Mixing	pH	Temp (°F)	Hardness (mg/l)
099	43°08'26"	76°18'00"	4.2	9.0	Seneca River	B	ONT-66-12	276*	359	31.67:1 C 16.3:0 A 40.89-HEW	8.0	25	250

POLLUTANT SUMMARY TABLE(S)

Outfall #	099 (May 15 to Oct 15)

Type of Treatment:	Mechanical bar screens, two aerated grit chambers, two primary settling tanks, five aeration tanks, five final settling tanks, two chlorine contact tanks.
and	
Sludge Handling:	Aerobic Sludge Digestion

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**				**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass						AWQC	Effluent			
	Avg	Max	Avg	Max	Conc.	Mass	Type	Basis	conc.	conc.	mass	Type	
Whole Effluent Toxicity (WET) TESTING									Recommended?		YES		WQ
Flow Rate, units = MGD	Average	4.0	Maximum	8.3	9.0			R - BPJ, TOGS 1.3.3	-	-	-	-	T
pH (SU)	Minimum	6.2	Maximum	7.8	6 - 9		Range	R - 40 CFR133. 102(c), 703.3	6.5-8.5	Technology - OK		-	T
$CBOD_5$ (30 day), mg/l, lbs/day	3.3	5	110.3	200	25	1876		R - 40 CFR 133.102, 703.3	D.O=4.0*	Technology - OK		MA	T
$CBOD_5$ (7 day), mg/l, lbs/day	5.0	10	185	500	40	3002		R - 40 CFR 133.102, 703.3	NA	---	---	7DA	T
UOD, (Daily Max), mg/l, lbs/day	24.5	40	788	2000	112	8400		R - TOGS 1003.3.3, 703.3	Narrative Std	Technology - OK		DM	T
TSS (30 day), mg/l, lbs/day	6.4	9	218	400	30	2252		R - 40 CFR 133.102, 703.2	NA	Technology - OK		MA	T
TSS (7 day), mg/l, lbs/day	8.6	16	318	720	45	3378		R - 40 CFR 133.102, 703.2	---	---	---	7DA	T
Solids, Settleable, ml/l	0.1	0.1	-	-	0.3			R - TOGS 1.3.3, 703.2	Narrative Std	Technology - OK		DM	T
Effluent Disinfection: [ ] All Year [X] Seasonal from: 5/15 - 10-15													
Fecal Coliform (30 day/7 day), #/100 ml	6.5/25	300/100	-	-	200/400		GM	R - 6NYCRR 703.4	200/400	200/400	---	30/7D-A	T
Chlorine, Total Residual, mg/l, lbs/day	1.65	2.3	-	-	2.0 mg/l	60 lb/d		R - TOGS 1.3.3, 1.1.1	0.005	0.8	---	DM	WQ

Phosphorus, mg/l	0.66	0.98	-	-	1.0			R - WQ (Great Lakes WQ Agreement)	1.0	1.0	---	MA	WQ
Ammonia, mg/l	4.6	16	-	-	Monitor			R -TOGS 1.1.1	0.93	Technology – OK		DM	T
TKN, mg/l	5.2	15	-	-	Monitor			R	NA	---	---	---	T

Existing effluent quality obtained from DMRs (2009 – 2012).
*Dissolved Oxygen – WQBEL based on worst case effluent DO of 2.0 mg/l.

Outfall	099 (Oct 16 to May 14)

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**				**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass						AWQC	Effluent			
	Avg	Max	Avg	Max	Conc.	Mass	Type	Basis	conc.	conc.	mass	Type	
Whole Effluent Toxicity (WET) TESTING									Recommended?		YES		WQ
Flow Rate, units = MGD	Average		Maximum		9.0 MGD			R-BPJ, TOGS 1.3.3	-	-	-	-	T
pH (SU)	Minimum		Maximum		6.0 – 9.0		Range	R-40 CFR133. 102(c), 703.3	6.5-8.5	Technology OK		---	T
$CBOD_5$ (30 day), mg/l, lbs/day	3.3	5	110.3	200	25	1876		R-40 CFR 133.102, 703.3	D0 = 4.0*	Technology OK		MA	T
$CBOD_5$ (7 day), mg/l, lbs/day	5.0	10	185	500	40	3002		R-40 CFR 133.102, 703.3	NA	Technology OK		7DA	T
TSS (30 day), mg/l, lbs/day	6.4	9	218	400	30	2252		R-40 CFR 133.102, 703.2	Narrative Std.	Technology OK		MA	T
TSS (7 day), mg/l, lbs/day	8.6	16	318	720	45	3378		R- 40 CFR 133.102, 703.2	NA	Technology OK		7DA	T
Solids, Settleable, ml/l	0.1	0.1	-	-	0.3	-		R- TOGS 1.3.3, 703.2	Narrative Std.	Technology OK		DM	T
Effluent Disinfection: [ ] All Year [X] Seasonal from: 5/15 - 10/15													
Fecal Coliform (30 day/7 day), #/100 ml	6.5/25	300/100	-	-	NA	-		R - 6NYCRR 703.4	200/400	200/400	---	30/7D-A	T
Chlorine, Total Residual, mg/l	1.65	2.3	-	-	NA	-		-	0.005	0.8	---	DM	WQ

Phosphorus, mg/l	0.66	0.98	-	-	1.0	-		R - WQ	1.0	1.0	---	MA	WQ
Ammonia	4.6	16	-	-	Monitor	-		BPJ	1.3	Technology OK		MA	T
TKN, mg/l	5.2	15	-	-	Monitor	-		R	NA	---	---	---	T

Existing effluent quality obtained from DMRs (2009 – 2012).
*Dissolved Oxygen – WQBEL based on worst case effluent DO of 2.0 mg/l.

Outfall	099 (continued)

Effluent Parameter (Units) (concentration units - mg/l, ug/l or ng/l; mass units - lbs/d or g/d)	**Existing Effluent Quality**				**Technology Based Effluent Limit**					**Water Quality Based Effluent Limit**				**Permit Basis** (T or WQ)
	concentration		mass					PQL		AWQC	Effluent			
	Avg/Max	95th/99th	Avg/Max	95th/99th	Conc.	Mass	Type	conc.	Basis	conc.	conc.	mass	Type	
Iron, Total Recoverable (lb/day)			31 / 50	64 / 89		Monitor			R-BPJ	No Std./Guidance Value		-----	-----	T
Copper, Total Recoverable (lb/day)			0.45 / 0.76	0.67 / 0.77		1.2			R-BPJ	0.0319-A	0.541	40.6	DM	T
Nickel, Total Recoverable (lb/day)			0.61 / 1.1	1.0 / 1.2		1.3			R-BPJ	0.1129-C	3.586	269.2	DM	T
Zinc, Total Recoverable (lb/day)			1.3 / 2.6	2.0 / 2.4		3.6			R-BPJ	0.254-A	4.21	316.0	DM	T
Selenium, Total Recoverable (lb/day)			0.13 / 0.5	0.33 / 0.42		0.20			BPJ	0.0046-C	0.150	11.0	DM	T
Cadmium, Total Recoverable (lb/day)			0.031 / 0.06	0.052 / 0.06		0.14			R-BPJ	0.0043-C	0.150	11.2	DM	T
Chromium, Total Recoverable (lb/day)			0.329 / 0.61	0.54/0.63		0.76			R-BPJ	0.1570-C	4.971	373.0	DM	T
Cyanide, Total (lb/day)			0.1 / 0.2	0.18 / 0.22		0.52			R-BPJ	0.0052-C	0.160	12.4	DM	T
Mercury, Total (lb/day)					50 ng/l				WQ (DL)	0.7 ng/l-H(FC)	0.7 ng/l*	------	MA	WQ*
Phenols, Total (lb/day)			1.2 / 3.6	3.0 / 4.3		1.4			BPJ	0.005-E	0.204	15.4	MA	T
Lead, Total Recoverable (lb/day)			0.2 / 1.5	0.74 / 1.05		1.7			BPJ	0.0101-C	0.404	30.4	DM	T

Existing effluent quality obtained from DMRs (2009 – 2012).
*- Recommend an effluent limit of 50 ng/l as daily maximum per TOGS 1.3.10.
Translator: Dissolved-To-Total; Cadmium-1.10, Chromium-1.0, Copper-1.042, Lead-1.264, Nickel-1.003, Selenium-1.0, Zinc-1.014